

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
6 January 2005 (06.01.2005)

PCT

(10) International Publication Number
WO 2005/001120 A1

(51) International Patent Classification⁷: C12Q 1/68,
C12M 1/34, G01N 33/48

(21) International Application Number:
PCT/AU2004/000864

(22) International Filing Date: 30 June 2004 (30.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003903298 30 June 2003 (30.06.2003) AU
2003903299 30 June 2003 (30.06.2003) AU

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

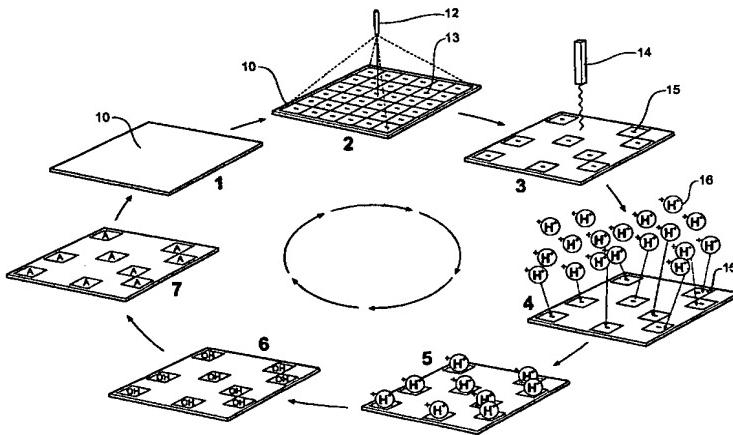
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MICRO AND NANO SCALE FABRICATION AND MANUFACTURE BY SPATIALLY SELECTIVE DEPOSITION



WO 2005/001120 A1

(57) Abstract: A method of fabrication or manufacture at micrometer and nanometer scale by spatially selective deposition of chemical substances so as to form a solid phase array on a substrate (10) which includes the steps of defining a region (15) on the substrate by forming an electrostatic charge on that region which is different from the electrostatic charge on other regions of the substrate such as by formation of a latent electrostatic image thereon, applying an emulsion to the substrate. The emulsion (16) has an electrically charged discontinuous phase and a component to be selectively deposited carried in or comprising the discontinuous phase. The discontinuous phase of the emulsion is attracted to the preselected region by attraction by the electrostatic charge on the region and deposition obtained with or without reaction. The electrostatic image may be formed by the use of photoconductor. The array formed may be for flat screen display panels, for manufacture of DNA chips, printed circuits, semiconductor chips, nanotechnology, micro-electromechanical systems, flexible printed circuits or the like.